Performance Measurement for Enhanced Results Management For the Customs Reform Unit Ministry of Finance Government of Egypt

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Workshop Manual and Reference Notebook

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TABLE OF CONTENTS

INTRODUCTION

Welcome to the workshop on Performance Measurement for Results Management.

Today we invite the Customs Reform Unit and Regional Customs Officers to become actively engaged in issues related to performance measurement. The Workshop is designed to build on your experiences and further develop your knowledge and practical skills related to performance measurement. These are some of the important questions we hope to address during our time together:

- How can we design and implement practical performance measurement systems that will produce useful and timely information for management decision-making?

- How do we identify the critical results of the CRU implementation plan?

- What are some practical skills that I need to identify indicators and baselines to strengthen my work in this area?

- How do we use results management for organizing team based activities?

ABOUT YOUR TRAINERS

Nadra Garas is a Research and Evaluation Associate at Development Associates. Her current work includes program evaluation, survey research and project monitoring. She recently evaluated USAID humanitarian assistance to post conflict Angola and the evaluation of the USAID Commodity Import Program. Ms Garas is well versed in current research and evaluation techniques. She has worked on the design and evaluation of economic development projects, health programs, community development initiatives, poverty alleviation programs and credit and enterprise development projects. These have included the evaluation of urban development and upgrading programs, women in development programs, small and micro enterprise development programs in both the informal and formal sectors. She conducted several studies on economic development and worked with various international development organizations in program design and evaluation. Ms. Garas has worked on the development of evaluation and research designs, survey and other data collection instruments, case studies, and focus groups and interviews. She completed her undergraduate degree in economics at the American University in Cairo. She is currently completing her PhD dissertation in the field of political economy at American University, Washington, D.C.

John P. Mason is an Executive Associate of Development Associates. Present work includes evaluation research, strategic planning, and performance monitoring for international development agencies. Recent positions include head of evaluation for USAID's Office of U.S. Foreign Disaster Assistance (1993-1996); on-site Coordinator of USAID's strategic planning/performance monitoring field mission technical assistance (1987-1993); and senior evaluator in USAID's Center for Development Information and Evaluation (1987-1989). He has worked for three decades in international development, including a decade overseas in Arab, African, and Caribbean countries. Mason, who did doctoral research on the impact of the petroleum extraction industry on socioeconomic change in a Saharan desert oasis community in Libya, received a PhD in Social Anthropology and African Studies from Boston University. He has taught anthropology at the University of Libya (1969-1970), Rensselaer Polytechnic Institute, (1971-1973), and the American University in Cairo (1973-1977). He was an official of the United Nations, having served in Libya (1977-1979) as a social planner on a national physical planning project, and worked for the Cooperative Housing Foundation as a development anthropologist and vice president (1979-1985). Mason is a former director of the USAID Development Studies Program in Washington (1985-1987).

Major Themes and Objectives of the Workshop

Theme	Objective
Management Approach	To enhance your know-how to use performance measurement for improved performance management
Program Level Orientation	To increase your skills to use performance measurement as a tool for project management and assessing program performance
Performance Measurement Know-How	To enhance your understanding of why and how to use performance indicators
Outcome	To improve your potential to act as a manager/activity implementor who promotes improved approaches in your management and implementation role; including team-based management

SESSION 1

Defining Objectives and Creating Results Statements

Session 1 Objectives

- Obtain the know-how to employ a results orientation to your management approach

Session 1 Learning Points

- A results orientation effectively applied to CRU program and activity management needs to be made explicit and operational
- A result is a completed act or a single final effect in contrast to an on-going process or something that is a means to an end

Introduction

This module presents a short course on a generic approach to performance measurement. It is directed at Customs officers at the CRU regional locations involved in the activity management and implementation process. The module borrows from and adapts the work of international development assistance organizations, foreign assistance agencies, and industry in performance management or "managing for results." The method proposed here represents one possible approach to performance management and is therefore not intended to represent *the* sole approach to managing for results.

For the purpose of this course, it is asserted that good management requires good monitoring and evaluation (M&E). Furthermore, it is maintained that to be effective M&E systems must be built into the design of projects *at the outset*. These systems must be bought into and owned by Customs officials and administrative staff, and their implementing Partner.

This section begins with a review of how to employ a results orientation. That will engage us briefly in a discussion of the need to monitor and evaluate performance. Then we will move to consider an approach to monitoring program performance.

Materials on the following topics are included in this section:

- establishing a results orientation
- identifying useful performance indicators
- assuring collection of high quality data.

The focal point in this module is “results,” particularly in the context of identifying and using quality performance indicators. Identifying such performance indicators is at the heart of sound performance measurement, and is also one of the most challenging steps in the performance management process.

Notes

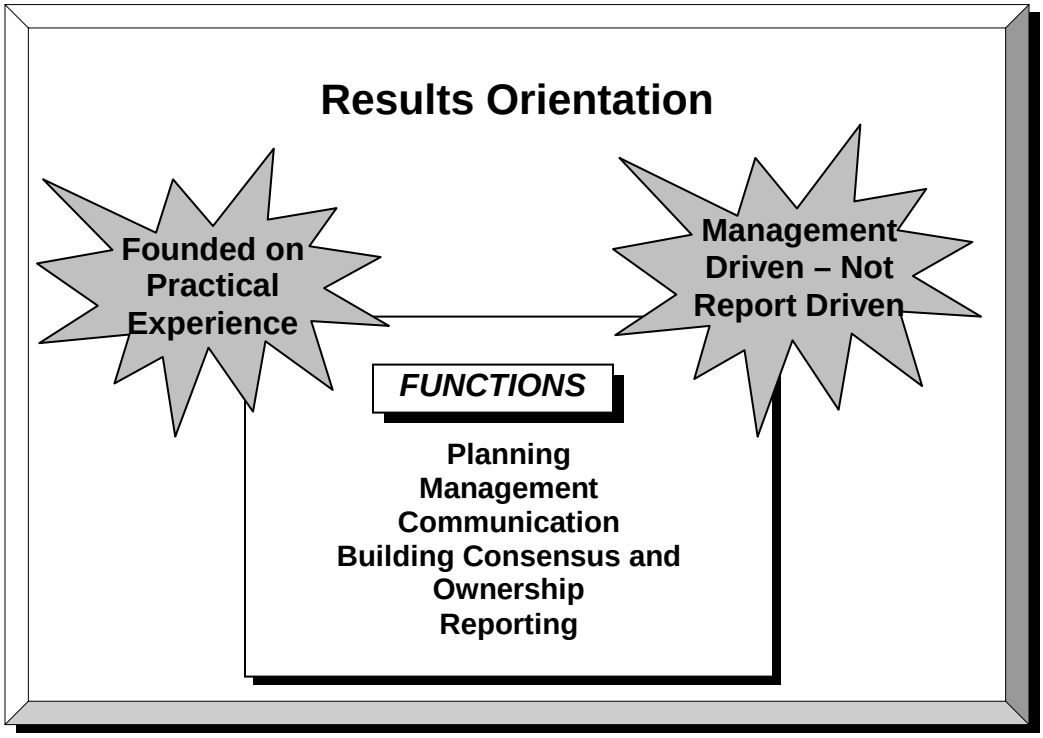
Utilizing a Results Orientation

Results Orientation – A narrative statement or graphical representation of the development hypotheses indicating the results and their casual relationships and underlying assumptions necessary for defining strategic objectives, intermediate results, and activity outcomes. The orientation also establishes an organizing basis for measuring, analyzing, and reporting on the results attendant to achieving these objectives and results.

Here we intend to make a results orientation a more conscious part of the performance management process, since it is a basic and highly useful tool to describe and illustrate the project or program development hypothesis. It provides a way to test the adequacy and effectiveness of the Strategic Objective, intermediate results and activity outcomes. Specifically, a results orientation facilitates the process of moving from the statement of SOs and results to identifying indicators and ultimately to tracking progress against a given target and indicator.

Use of results orientation allows you to test the causal relationships embedded in the development hypothesis. A causal relationship is designed as a plausible cause and effect linkage, where development experts agree that a result is achieved because related, interdependent results were achieved.

Notes

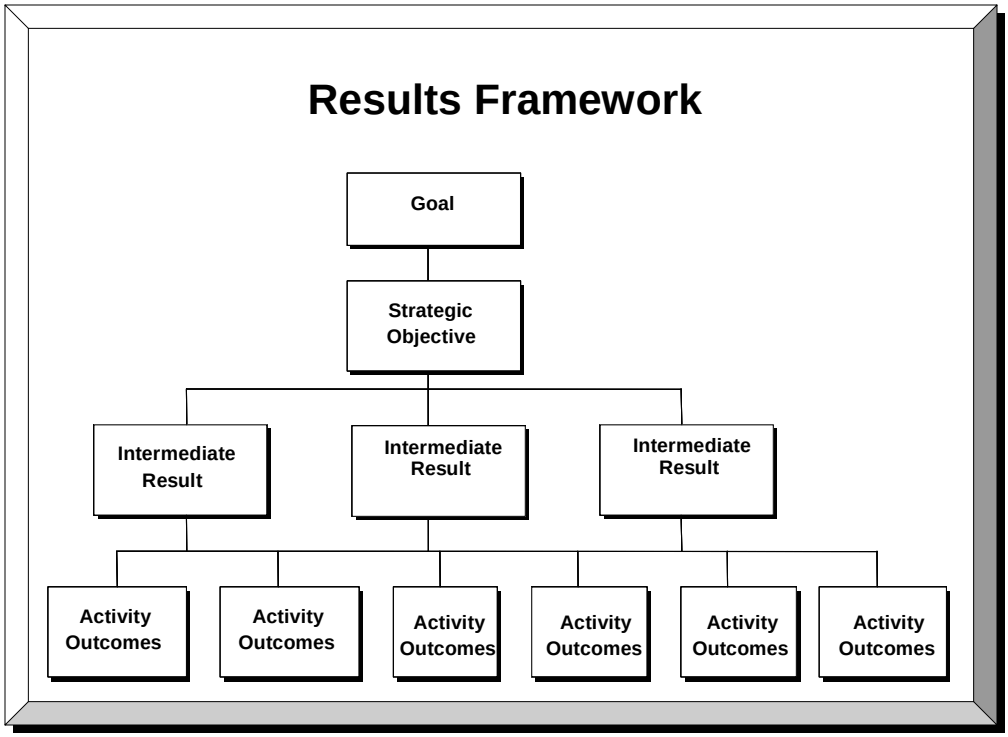

Results Orientation
Founded on Practical Experience
Management Driven – Not Report Driven
FUNCTIONS
Planning
Management
Communication
Building Consensus and Ownership
Reporting

Notes

A results orientation becomes part of the performance management tool kit, since it can be used to focus on the process of achieving SOs and results. It therefore serves to underscore that activities and programs need to be carefully monitored to indicate progress towards achieving results.

A results orientation is essentially the *text* that describes the development hypothesis, normally illustrated with a graphic representation of the SO, intermediate result (IR), and activity outcomes in relationship to each other.

A hierarchy of objectives can be easily depicted in the form of an "objective tree," such as the following:



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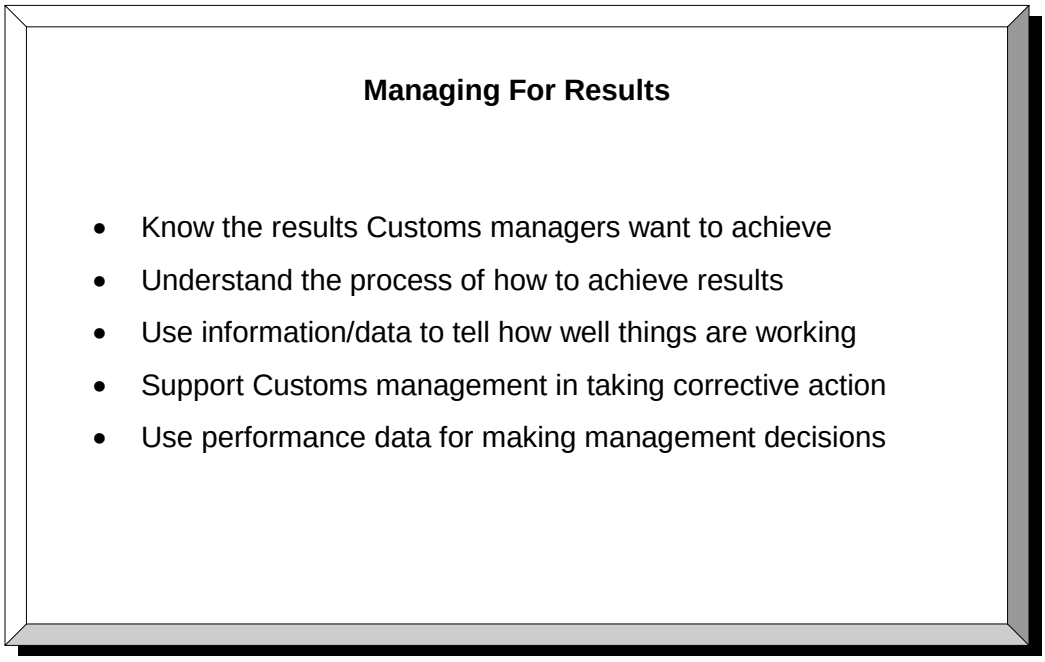
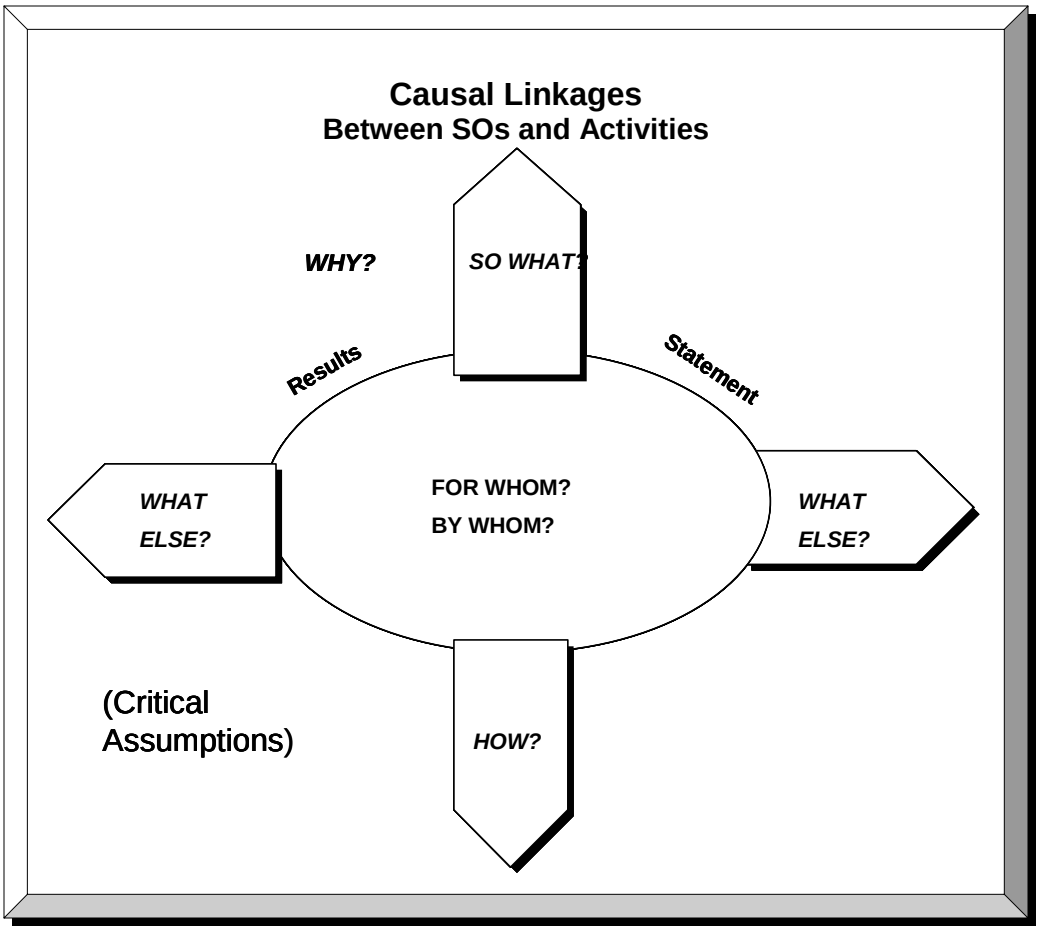

Managing For Results
Know the results Customs managers want to achieve
Understand the process of how to achieve results
Use information/data to tell how well things are working
Support Customs management in taking corrective action
Use performance data for making management decisions

Notes


Causal Linkages
Between SOs and Activities
WHY?
SO WHAT?
Results
Statement
WHAT
ELSE?
FOR WHOM?
BY WHOM?
WHAT
ELSE?
(Critical
Assumptions)
HOW?

Notes

The causal linkages depicted on the previous page are implicit in the "objective tree" and are relevant to management through a process of continuously asking questions about whether results are being achieved or not.

As you read the objective tree from the bottom up, from outcomes to the SO, the logic of the statements should answer the question, "why are we doing this?" or "what does this matter?" In other words, "for what greater *result*?"

Conversely, as you read down form the SO, the intermediate results and outcome statements should answer the question "how do we cause this effect?" That is, what other results will be necessary to achieve this particular result? "How" in this context should not be interpreted as "what activities will carried out" to achieve this result, since only results — not activities — are included in the results orientation.

"What else?" refers to *all* the other results that must occur in concert with the outcomes to cause the intended effect above, that is, the next level of result. In order to attain the result above have you identified all results that are *necessary* and *sufficient* to lead to the next level?

Critical to presenting the logic of the development hypothesis are the *critical assumptions* that underpin the framework. These assumptions are usually reflected in accompanying text.

Notes

The result should be stated as a completed end-result in contrast to an on-going process or activity.

Unidimensional results are those with one final effect, e.g., “increased broad-based private sector investment (the final effect may require more than one descriptor) in contrast to multi-dimensional results which are actually the combination of more than one result, e.g., “healthy, better educated families.” The use of multi-dimensional results will cause difficulties in developing the logic of the design as well as the measurement of the result.

An “objectively verifiable result” is one that, given the supporting data, a skeptic and a proponent would both agree is a bonafide result. The actual measurement of this result might rely on qualitative or quantitative data, depending on what is most realistic and appropriate.

Notes

Small Group Exercise 1
Defining Objectives and Creating Results Statements

Exercise Objectives

- Understand the potential for "Managing for results" by the CRU and how to design an effective results framework.

Learning Point

- A good results framework and clear results statements are essential for performance management.

1) Read the Seleh-Ed-Deen Port Example.

2) Develop results statements for each level (Strategic Objective, Intermediate Result, and Activity Outcomes) of this activity.

3) Use the accompanying summary of criteria for sound results.

4) Reach consensus within your group on three results statements.

5) Complete the results statement assessment worksheet on the next page.

6) Write your three results statements on a flip chart and assign a group member to report out.

SMALL GROUP EXERCISE 1
RESULTS STATEMENT ASSESSMENT

Strategic Objective:

_____

Results Statement:

_____

CRITERIA FOR ASSESSING THE RESULTS STATEMENT	Yes	No	Unsure	COMMENTS
Is the results statement **MEASURABLE?**	❑	❑	❑	
Is the results statement **MEANINGFUL?**	❑	❑	❑	
Is the results statement **REALISTIC?**	❑	❑	❑	
Is the results statement focused on **CRU's STRATEGIC COMMITMENTS?**	❑	❑	❑	
Is the results statement **CUSTOMER or STAKEHOLDER DRIVEN?**	❑	❑	❑	
Is the results statement within the **MANAGEABLE INTEREST** of the Operating Unit and its development partners?	❑	❑	❑	
Is the results statement focused on **RESULTS,** e.g., impact, quality, cost/efficiency, or timeliness - (focused on the RESULTS or outcomes of activities rather than a description of activities themselves)?	❑	❑	❑	
Is the statement **UNI-DIMENSIONAL** (focused on one result rather than a combination of results)?	❑	❑	❑	

OTHER COMMENTS:

RECOMMENDATION:

___ **Accept results statement**
___ **Revise results statement and then accept**
___ **Reject results statement**

RESULTS FRAMEWORK ASSESSMENT

Strategic Objective:

_____

CRITERIA FOR ASSESSING THE RESULTS FRAMEWORK	Yes	No	Unsure	COMMENTS
CAUSAL LINKAGE (A) At each level of the results framework, does achievement of one result cause the achievement of the other? Is the linkage direct?	❑	❑	❑	
CONTRIBUTIONS OF USAID CAUSAL LANGUAGES (B): At each level of the results framework, have activities been to cause the result at the next level?	❑	❑	❑	
MANAGEABLE INTEREST (A): Is the Strategic Objective level result one that the team, working with its partners, can materially affect?	❑	❑	❑	
MANAGEABLE INTEREST (B): Is the team willing to be held accountable for all results within the results framework, including the SO level result?	❑	❑	❑	
CRITICAL ASSUMPTIONS: Have all the critical assumptions been identified at each level of the results framework?	❑	❑	❑	

OTHER COMMENTS:

RECOMMENDATION:

___ Accept results framework
___ Revise results framework and then accept
___ Reject results framework

SESSION 2
Performance Measurements and Management

Session 2 Objectives

- See the benefits of program performance
- Understand the importance of sound performance indicators to effective performance management

Session 2 Learning Points

- The strength of a performance measurement system is its ability to provide performance information which is used to *manage* for results

A Brief Review

Performance indicators are specific and verifiable measures of how well a program is progressing. They are at the heart of a performance management system and are an indispensable tool for making management decisions to improve program performance.

Performance indicators can measure progress at the levels of the Strategic Objective, Intermediate Results and activity outcomes. In order to manage for results at the activity or program level, Customs officials will want to establish and monitor performance measures for the SO and IR. This activity-level monitoring is the responsibility of CRU in cooperation with the implementing Partner.

Selecting Performance Indicators

Performance indicators, simply put, are measures that describe how well a Customs program is achieving its objectives.

While a results statement identifies what we expect to accomplish, indicators tell us specifically what to measure to determine whether the objective has been achieved. Indicators are often quantitative measures but may also be qualitative observations. They define how performance will be measured along a scale or dimension, without specifying a particular level of achievement. (Planned levels of achievement — targets are separate from the indicators themselves.)

Notes

Steps (in brief) in Selecting Performance Indicators

1. Clarify the results statements — SO and IRs

   — carefully consider the result desired

   — avoid overly broad results statements

   — be clear about what type of change is implied

   — clarify whether the change being sought is an absolute change, a relative change or no change

   — be clear about where change should appear

   — identify more precisely the specific targets for change

   — study the activities and strategies directed at achieving change

2. Develop a list of possible indicators

3. Assess each possible indicator against the criteria presented in this notebook

4. Select the “best” performance indicators — be selective

Notes

Examples of Specific Indicators
Criterion: Indicators are Framed In Precise Operational Terms

Poor Example	Good Example
# of successful export firms	# or % of export firms experiencing an annual increase in export volume of at least 5% beginning in year 2000 for the next five years.

Notes

Direct Indicators

- Indicators are direct measures of the SO and IRs.
- If direct indicators are not available or feasible to collect, use credible proxy measures.

Notes

Examples

Criterion: Indicators are direct measures of the SO or IRs

Good Examples

Result	Enhanced Facilitation of Trade
Indicator:	Average cargo transit time through port (imports/exports)
Indicator:	Average customs clearance time (from submission of Customs documentation to clearance notification)

Notes

CRITERIA

If Direct Indicators are not Feasible; Strong Proxy Measures are Used

Good Examples	
Result	Enhanced facilitation of trade
Direct Indicator	Average customs clearance time
Proxy Indicator	% of exporters and importers satisfied with customs clearance time

Poor Examples	
Result	Customs procedures improved
Direct Indicator	Value of exports
Proxy Indicator	Egyptian pound firm income derived from exports

Notes

Recommended Standards for Indicator Selection

Good performance data strive to meet the following quality standards:

- **Direct:** Performance indicators should closely track the results they are intended to measure. If a direct indicator cannot be used because of cost or other factors, a **proxy indicator** (an indirect measure of the result that is related by one or more assumptions) may be used to measure the result.

- **Objective:** Performance indicators should be unambiguous about what is being measured. Performance indicators should be unidimensional (should measure only one aspect at a time).

- **Useful for Management:** Performance indicators selected for inclusion in the PMP should be useful for the relevant level of decision-making.

- **Practical:** Operating Units should select performance indicators for which data can be obtained at reasonable cost and in a timely fashion.

- **Attributable to CRU Efforts:** Performance indicators selected for inclusion in the PMP should measure changes that are clearly and reasonably attributable, at least in part, to CRU efforts. In the context of performance indicators and reporting, attribution exists when the outputs of CRU-financed activities have a logical and causal effect on the result(s) being measured by a given performance indicators.

- **Timely:** Performance indicators should be available when they are needed to make decisions. Experience suggests that the information needed for managing activities should be available on a quarterly basis. Data that available after a delay of a year of more may be difficult to use.

- **Adequate:** Operating Units should have as many indicators in their Performance Management Plan as are necessary and cost effective for management and reporting purposes. In most cases, two or three indicators per result (per Strategic Objective or Intermediate Result) should be sufficient to assess performance.

Notes

Small Group Exercise 2
Identifying Good Indicators
Performance Targets

Exercise Objectives

- Use criteria established by USAID for identifying good indicators

Learning Point

- Good indicators are key to improved performance monitoring and reporting.

Using the Saleh ed-Deen Port case,

1) Focus on the results statements presented at the end of Small Group Exercise 1.

2) Use the summary of criteria for good indicators found on the previous page.

3) For each of those results statements, identify an indicator or indicators which you think best measure(s) the intended result.

4) Reach consensus within your group on the “best” indicators.

5) Complete the worksheet on Performance Indicator Quality Assessment found on the following pages.

6) Write these indicators on a flip chart and assign a group member to report out to the whole group.

PERFORMANCE INDICATOR QUALITY ASSESSMENT

Indicator:

_____

Relevant Result:

_____

CRITERIA	COMMENTS
Is the indicator DIRECT? ▪ Does it closely measure the result it is intended to measure? ▪ Is it grounded in theory and practice? ▪ Does it represent an acceptable measure to both proponents and skeptics? ▪ If it is a proxy, is it as directly related to the relevant result as possible?	
Is the indicator OBJECTIVE? ▪ Is it unambiguous about what is being measured? ▪ Is there general agreement over the interpretation of the results? ▪ Is it unidimensional (i.e., does it measure only one phenomenon at a time)? ▪ Is it operationally precise (i.e., is there no ambiguity over what kind of data should be collected)?	
Is the indicator PRACTICAL? ▪ Are timely data available (i.e., is data current and available on regular basis)? ▪ Can the data be collected frequently enough to inform management decisions? ▪ Are data valid and reliable? ▪ Are the costs of data collection reasonable?	

CRITERIA	COMMENTS
Is the indicator ADEQUATE? ▪ Does it merely indicate progress rather than attempt to fully describe everything an activity accomplishes? ▪ Taken as a group, are the indicator and its companion indicators the minimum necessary to ensure that progress toward the given result is sufficiently captured?	
Attributable to CRU ▪ Can changes in the value of the indicator be reasonably attributed to the efforts of CRU and its partners?	
Is the indicator USEFUL for management?	

OTHER COMMENTS:

RECOMMENDATION:

SESSION 3

Developing Performance Measurement Systems

Session 3 Objectives

- Learn how to establish a framework for measuring and managing performance.
- Learn capacity building for data collection and management
- More specifically, obtain familiarity with establishing baselines and targets

Session 3 Learning Points

- A well-designed data collection system is critical to improved performance management and reporting

Notes

Monitoring and Evaluating Performance

- To effectively manage performance, implementers must regularly collect, review and use information on achievements.
- Performance information plays a critical role in planning and managing decisions.
- Conduct reviews and evaluations periodically to assess performance against expected results and to monitor validity of critical assumptions

Performance Measurement Systems are designed to provide limited performance information — using a few key performance *indicators* — for each intermediate result and SO. The reported progress, as indicated by these few measures allows managers to *monitor* what is being achieved over time in order to judge whether the development hypothesis and its accompanying activities are actually delivering the desired results. Therefore, reliable performance measurement data are crucial to making important strategic decisions and "managing for results."

Perhaps not surprisingly, performance measurement data do not tell managers *why* certain results are being achieved or not. To obtain this information, which is often critical for decision-making, assessments may be done to test assumptions, the cause-and-effect linkages in their program, and the emergence of new constraints within the development environment.

Notes

Participation in Performance Measurement

Customs officials, managers and implementing Partners and other key stakeholders should be included in the process of:

- Planning performance measurement systems
- Collecting and interpreting performance information
- Conducting program performance reviews

Performance Measurement

The strength of a performance measurement system is not its ability to report on results, but its ability to provide performance information that is used to *manage* for results. "Users" of this information include the CRU team, Partners and other key stakeholders who implement projects and programs. Therefore an effective performance measurement system requires developing an understanding and agreement among the CRU team and implementing Partners on what is to be achieved, specifically what "achievement" will look like, and how will important performance management decisions will be made.

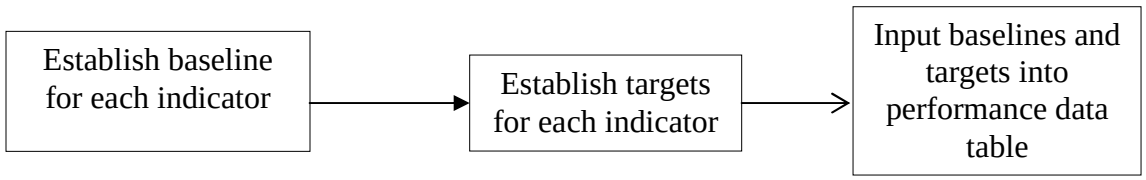
Implications for managers are that Partners and other stakeholders need to actively participate in identifying and using indicators as part of the management/implementation of a project. This process should benefit implementing Partners and other key stakeholders who through their involvement in the process might decide to adopt a performance measurement approach to their own organizations.

Notes

Establishing Baselines and Targets

Baseline data and performance targets are critical to managing for results because they are key reference points for assessing program performance. Baseline data establishes a reference point for the start of the program period. When the team establishes performance targets, it commits itself to specific intended results to be achieved with in explicit time frames. Each year, the team assesses its performance by comparing actual results against these targets. The process of establishing baselines and targets can be broken down into three sub-steps.

Establish Baselines and Targets



Notes

Key Definition, Guidance and Helpful Resources

KEY DEFINITIONS: The following definitions are relevant to this performance monitoring plan (PMP) task:

- **Performance Baseline:** The value of a performance indicator at a point in time that is relevant to tracking performance. Ideally, this is just prior to the implementation of activities that contribute to the achievement of the relevant strategic element.
- **Performance Targets:** Specific, planned level of result to be achieved within an explicit time frame.
- **Final Target:** The Planned value of a performance indicator at the end of the planning period. For SOs, final targets are often set at five to eight years away. For IRs, final targets are usually set three to five years away.
- **Interim Target:** Targets set for years in between the baseline and final target year (e.g., for years in which change is expected and data collection is possible).

Notes

Establish Indicator Baselines

The baseline measure establishes the reference point for the start of the program period. In some cases, planners may want to go back several years to correctly portray the context in which progress will be made. It is preferable if the baseline immediately precedes the start of a new strategy because we are trying to gauge the progress of a particular strategy. It will not always be possible to secure baseline data for the chosen year. In that instance, the baseline may be the most recent past year for which the relevant information exists or can be acquired.

Examine the Performance Trendline

When selecting a baseline year or years, examine the trendline of past performance. There could be unexpected spikes or dips in the trend and a year which one or the other occurs would be a poor year to select as the baseline year.

How to Establish a Baseline when Information is Inadequate

Where baseline information is inadequate, many operating units initiate a data collection effort as soon as their strategy is approved and the performance indicators they will use to judge progress are selected. The first set of data collected on these indicators becomes the formal baseline against which targets are set and future progress is assessed. For people-specific indicators, baselines should disaggregate data by gender and/or other relevant stakeholder groups.

Establish Indicator Targets

Once performance indicators have been developed and baseline data collected, establish final (usually end of SO date) and interim (usually annual) performance targets. Targets should be optimistic, but realistic. A common practice is to set targets that will force you to "stretch" to exceed your past performance. However, special care should be taken not to set the target outside of reasonable expectations. Setting a target too high, or allowing zero tolerance for human error, undermines morale and makes targets appear unattainable. Instead, set targets that excite team members' and partners' interest and elicit commitment.

Conduct a Target Setting Meeting

Conduct a target setting meeting to identify potential performance targets. Have at least one target setting session for each indicator. Involve your implementing partners in the meetings, whenever possible. Collaborating with others who are knowledgeable about the local situation and about reasonable expectations for accomplishments is key to target setting.

Approaches to Target Setting

Determining appropriate targets for each indicator can be accomplished in several ways. Much will depend on the information available or readily gathered. Target setting approaches include:

- **Project future trend, then add the "value added" for CRU activities**. This approach involves estimating the future trend in the absence of CRU's program, and then adding whatever gains can be expected as a result of CRU's efforts. Projecting the future can

be very difficult, but can be made somewhat easier if historical data are available to establish a trend line.

- **Establish a final performance target for the end of the planning period, then plan progress from the baseline level.** This approach involves deciding on the program's performance target for the final year, and then defining a path of progress for the years in between. Final targets may be based on benchmarking techniques or on judgments of experts, program staff, customers or partners.

- **Set annual performance targets.** This approach is based on judgments about what can be achieved each year, instead of starting with a final performance level and working backwards.

- **Benchmarking.** Look at other organizations or institutions that use the same types of indicators to demonstrate progress and set targets accordingly. For example, if you are tracking the number of days for an institution to register new enterprises, research the length of time it takes for other countries and use those data points as benchmarks for setting your indicator targets.

Principles of Target Setting

As you apply the target setting approaches described above, keep in mind some basic principles for setting targets.

- Think about what the trend has been in the past for any given indicator.
- Consider parallel experience from other countries.
- Think through when program activities will have an impact on indicator values.
- Think about external conditions which may affect indictor values over time.
- Consider setting a **target range** rather than a single numerical target.
- Consider how clearly the target or the actual will communicate and how the trendline will move when deciding on an indicator's unit of measurement.
- When indicators are disaggregated, targets should be disaggregated as well.

Notes

Small Exercise Group Exercise 3
Setting a Baseline and Performance Targets

Exercise Objectives

- Learning basic criteria for assessing performance data quality
- Obtaining know-how in determining a baseline and establishing annual performance targets
- Develop practical skills for designing and planning activity evaluations for results management

Learning Point

- Identifying the appropriate baseline data is essential for knowing whether you are achieving you intended results.

For each indicator:

a. Define a unit of measurement.

b. Determine if any disaggregating is necessary.

c. Based on the requirements for data quality, establish a baseline.

d. Establish targets for the baseline year and for out years. .

e. Complete the tables (in very clear writing) on the overhead transparency, using one transparency for each IR and sub-IR, and assign a person from your group to report out for each indicator your unit of measurement, any disaggregation, the baseline and its rationale and targets for out years.

Notes

Table 1

PERFORMANCE MONITORING & EVALUATION PLAN— INDICATORS, UNITS OF MEASURE, DISAGGREGATION, BASELINE, TIMELINE & DATA COLLECTION METHOD

Key Program Results	Indicator	Unit of Measure & Collection/ Reporting Schedule	Disaggregation	Baseline Year (2004) Value	2005 Target	2005 Actual	2006 Target	2006 Actual	2007 Target	2007 Actual	Data Collection Method

Table 1.1

PERFORMANCE MONITORING & EVALUATION PLAN— INDICATORS, UNITS OF MEASURE, DISAGGREGATION, BASELINE, TIMELINE & DATA COLLECTION METHOD

Key Program Results	Indicator	Unit of Measure & Collection/ Reporting Schedule	Disaggregation	Baseline Year (2004) Value	2005 Target	2005 Actual	2006 Target	2006 Actual	2007 Target	2007 Actual	Data Collection Method

Table 1.2

PERFORMANCE MONITORING & EVALUATION PLAN— INDICATORS, UNITS OF MEASURE, DISAGGREGATION, BASELINE, TIMELINE & DATA COLLECTION METHOD

Key Program Results	Indicator	Unit of Measure & Collection/ Reporting Schedule	Disaggregation	Baseline Year (2004) Value	2005 Target	2005 Actual	2006 Target	2006 Actual	2007 Target	2007 Actual	Data Collection Method

Table 1.3

PERFORMANCE MONITORING & EVALUATION PLAN— INDICATORS, UNITS OF MEASURE, DISAGGREGATION, BASELINE, TIMELINE & DATA COLLECTION METHOD

Key Program Results	Indicator	Unit of Measure & Collection/ Reporting Schedule	Disaggregation	Baseline Year (2004) Value	2005 Target	2005 Actual	2006 Target	2006 Actual	2007 Target	2007 Actual	Data Collection Method

Table 1.4

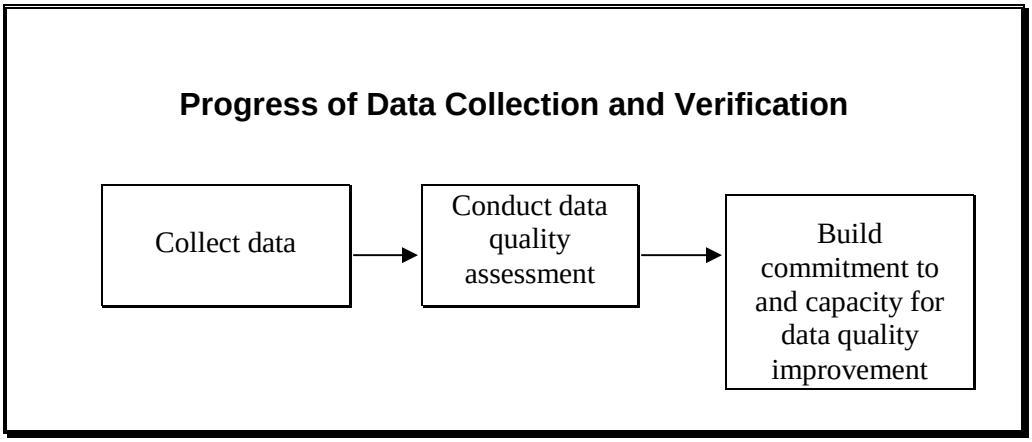
PERFORMANCE MONITORING & EVALUATION PLAN— INDICATORS, UNITS OF MEASURE, DISAGGREGATION, BASELINE, TIMELINE & DATA COLLECTION METHOD

Key Program Results	Indicator	Unit of Measure & Collection/ Reporting Schedule	Disaggregation	Baseline Year (2004) Value	2005 Target	2005 Actual	2006 Target	2006 Actual	2007 Target	2007 Actual	Data Collection Method

SESSION 4
Data Collection and Quality

In order to manage for results, you need to gather and analyze data that is valid, reliable, and timely. Poor quality data can lead to incorrect inferences, e.g., interventions had a given impact when they did not or vice versa. You should take steps to understand the appropriateness and use of different kinds of data collected, understand data limitations, correct these limitations where cost effective, and learn to manage for results when data are known to be imperfect.

Knowing that demonstrating performance rests on the quality of performance data, you can act effectively to improve activity design and performance and revise strategies appropriately. The process of verifying performance data quality can be broken down into three sub-steps.



Notes

Knowing that demonstrating performance rests on the quality of performance data, you can act effectively to improve activity design and performance and revise strategies appropriately. The process of verifying performance data quality can be broken down into three sub-steps.

Key Definitions

The following definitions are relevant to this task:

- **Verification:** Checking or testing performance data to reduce the risk of using data that contain significant errors.
- **Verification:** Testing of data to ensure that no error creates significant bias.
- **Bias:** Refers to the likelihood that data collected may reflect only a portion of the spectrum of relevant opinion. Bias often occurs as the result of the collection of an incomplete or inaccurately weighted sample of data.
- **Significant error (including bias):** An error that affects conclusions about the extent to which performance goals have been achieved.
- **Measurement error:** Results primarily from weaknesses in design of a data collection instrument; inadequate controls for biases in responses or reporting; or inadequately trained or supervised enumerators.

Before you begin assessing all of the data, take into consideration to source of data, and the impact this might have on the assessment process.

Assess Data from Different Sources

The rigor to which a data quality assessment is applied to a data source (i.e., CRU, implementing partner, secondary source) will differ for each source. The goal to assessing data from implementing partners and secondary sources is for you to be aware of data strengths and weaknesses and the extent to which data can be trusted when making management decisions and reporting.

Plan for on-Going Data Quality Assessments

Do not stop reviewing data quality once the performance data is reported. Plan to regularly review data quality to ensure that it continues to support the needs of the SO and IRs in performance monitoring.

On-going Data Quality Assurance

Over the course of the strategy implementation, plan to:

- Build data quality assessment into normal work processes, including ongoing reviews and site visits.
- Use software checks and edits of data on computer systems and review their implementation.
- Use feedback from data users and other stakeholders.
- Compare performance information with other sources of similar data or program evaluation.

- Obtain verification by independent parties.

For each indicator reported reassess data quality as necessary, but at intervals of no greater than three years. These assessments will ensure that performance information is sufficiently complete, accurate, and consistent. Conduct these assessments consistent with data quality standard. In particular:

- Verify and validate performance information to ensure that data are of reasonable quality.
- Review data collection, maintenance, and processing procedures to ensure that they are consistently applied and continue to be adequate.
- Document this assessment and keep a complete report on file.

Set Up A "Data Quality File"

A good way to maintain adequate documentation of data quality and assessment is to set up a simple data quality file. Use this file to store copies of data collection instruments, source documents, raw figures or worksheets used to calculate indicators, data quality assessment memos and reports, etc.

TABLE
Data Quality 1

Requirements for Data Quality

Performance data should be as complete, accurate, and consistent as management needs and resources permit. To be useful in managing for results and credible for reporting, performance data should also meet reasonable standards of validity, reliability, timeliness, precision, and integrity.

- **Validity:** Data are valid to the extent that they clearly, directly, and adequately represent the result that was intended to be measured. Measurement errors, unrepresentative sampling, and simple transcription errors may adversely affect data validity.

- **Reliability:** Data should reflect stable and consistent data collection processes and analysis methods over time. Managers should be confident that progress toward performance targets reflects real changes rather than variations in data collection methods. Reliability can be affected by threats to validity and changes in the process of data collection.

- **Timeliness:** Data should be available with enough frequency and should be sufficiently current to inform management decision-making at the appropriate levels. Effective management decisions depend upon regular collection of up-to-date performance information.

- **Precision:** Data should be sufficiently accurate to present a fair picture of performance and enable the SO Team to make confident management decisions. The expected change being measured should be greater than the margin of error.

- **Integrity:** Data that are collected, analyzed, and reported should have mechanisms in place to reduce the possibility that they are manipulated for political or personal reasons.

Notes

Key Criteria for Assessing Performance Data Quality

TABLE
Data Quality 2

Criteria	Answers the questions:	Affected by:
Validity	Do data clearly and directly measure what we intend?	**Measurement error.** Can result from weak design of data collection instrument, inadequate control for biases in responses or reporting, or inadequately trained or supervised enumerators. **Sampling error.** Sample may not be representative, too small for statistical extrapolation or contain sample units based on supposition rather than statistical representation. **Transcription error.** Data entry errors may occur when transcribing data from one source to another. Ensure transcriptions must be applied consistently and final numbers reported accurately.
Reliability	Using the same measurement procedures, can the same results be obtained?	**Changes in the data collection process.** Ensuring that data are reliable requires that the collection process be consistent from year to year.
Timeliness	Are data sufficiently current and available to inform decision-making at the appropriate level?	**Frequency.** Performance data are available on a frequent enough basis to regularly inform program management decisions. **Currency.** Data are sufficiently up to date to guide decision-making (e.g., quarterly). Data collected infrequently (every 2-5 years), or with a substantial lag time (>1 year), can help track long-term trends and confirm lower level data accuracy.
Precision	What margin of error is acceptable given the management decisions to be affected?	**Acceptable margin of error.** The expected change being measured should be greater than the margin of error.
Integrity	Are mechanisms in place to reduce the possibility that data are manipulated for political or personal reasons?	**Risk.** Data are at greatest risk during data collection and analysis. Objectivity and independence. Needed in key data collection, management, and assessment procedures. **Confidence in data.** Need for confidence in data from secondary sources. May require an independent review of secondary source data.

Small Group Exercise 4
Assessing Customs Data Quality

Exercise Objectives

- How to apply data quality criteria to customs data. Use data quality.

Learning Point

- Good data quality is key to effective performance management.

1) Review the data presented.

2) Discuss any issues of quality pertaining to these data.

3) Review the criteria for data quality presented in the following pages.

4) Determine if these data meet each of the following criteria:

   a. Validity – Face Validity
   b. Reliability – Consistency
   c. Timeliness – Frequency
   d. Precision
   e. Integrity

5) Complete the forms for the above criteria.

6) Write your assessment on a flip chart and assign a group member to report out to the whole group.

1. VALIDITY—Do the data adequately represent performance?			
Face Validity	**Yes**	**No**	**Comments**
➢ Is there a solid, logical relation between the activity or program and what is being measured, or are there significant uncontrollable factors?	❑	❑	
Transcription Error			
➢ What is the data transcription process? Is there potential for error?	❑	❑	
➢ Are steps being taken to limit transcription error? (e.g., double keying of data for large surveys, electronic edit checking program to clean data, random checks of partner data entered by supervisors)	❑	❑	
➢ Have data errors been tracked to their original source and mistakes corrected?	❑	❑	
➢ If raw data need to be manipulated to produce the data required for the indicator:	❑	❑	
➢ Are the correct formulae being applied?	❑	❑	
➢ Are the same formulae applied consistently from year to year, site to site, data source to data source (if data from multiple sources need to be aggregated)?	❑	❑	
➢ Have procedures for dealing with missing data been correctly applied?	❑	❑	
➢ Are final numbers reported accurate? (E.g., does a number reported as a "total" actually add up?)	❑	❑	
Representativeness of Data			
➢ Is the sample from which the data are drawn representative of the population served by the activity?	❑	❑	
➢ Did all units of the population have an equal chance of being selected for the sample?	❑	❑	
➢ Is the sampling frame (i.e., the list of units in the target population) up to date? Comprehensive? Mutually exclusive (for geographic frames)	❑	❑	
➢ Is the sample of adequate size?	❑	❑	

1. VALIDITY—Do the data adequately represent performance?			
	Yes	**No**	**Comments**
➢ Are the data complete? (i.e., have all data points been recorded?)	❑	❑	
Recommendations for improvement:			

2. RELIABILITY—Are data collection processes stable and consistent over time?			
	Yes	**No**	**Comments**
Consistency			
➢ Is a consistent data collection process used from year to year, location to location, data source to data source (if data come from different sources)?	❑	❑	
➢ Is the same instrument used to collect data from year to year, location to location? If data come from different sources are the instruments similar enough that the reliability of the data are not compromised?	❑	❑	
➢ Is the same sampling method used from year to year, location to location, data source to data source?	❑	❑	
Internal quality control			
➢ Are there procedures to ensure that data are free of significant error and that bias is not introduced?	❑	❑	
➢ Are there procedures in place for periodic review of data collection, maintenance, and processing?	❑	❑	
➢ Do these procedures provide for periodic sampling and quality assessment of data?	❑	❑	
Transparency			
➢ Are data collection, cleaning, analysis, reporting, and quality assessment procedures documented in writing?	❑	❑	
➢ Are data problems at each level reported to the next level?	❑	❑	
➢ Are data quality problems clearly described in final reports?	❑	❑	
Recommendations for improvement:			

3. TIMELINESS—Are data collected frequently and are they current?

	Yes	No	Comments
Frequency			
➢ Are data available on a frequent enough basis to inform program management decisions?	❑	❑	
➢ Is a regularized schedule of data collection in place to meet program management needs?	❑	❑	
Currency			
➢ Are the data reported in a given timeframe the most current practically available?	❑	❑	
➢ Are data from within the policy period of interest? (i.e., are data from a point in time after intervention has begun?)	❑	❑	
➢ Are the data reported as soon as possible after collection?	❑	❑	
➢ Is the date of collection clearly identified in the report?	❑	❑	

Recommendations for improvement:

4. PRECISION—Do the data have an acceptable margin of error?

	Yes	No	Comments
➢ Is the margin of error less than the expected change being measured?	❑	❑	
➢ Is the margin of error is acceptable given the likely management decisions to be affected? (consider the consequences of the program or policy decisions based on the data)	❑	❑	
➢ Have targets been set for the acceptable margin of error?	❑	❑	
➢ Has the margin of error been reported along with the data?	❑	❑	
➢ Would an increase in the degree of accuracy be more costly than the increased value of the information?	❑	❑	

Recommendations for improvement:

5. INTEGRITY—Are data are free of manipulation?			
	Yes	**No**	**Comments**
➢ Are mechanisms in place to reduce the possibility that data are manipulated for political or personal reasons?	❑	❑	
➢ Is there objectivity and independence in key data collection, management, and assessment procedures?	❑	❑	
➢ Has there been independent review?	❑	❑	
➢ If data is from a secondary source, is USAID management confident in the credibility of the data?	❑	❑	
Recommendations for improvement:			